AN EXPLORATORY STUDY OF THE TAX FAIRNESS DIMENSIONS OF INDIVIDUAL TAXPAYERS IN SOUTH AFRICA

by

Mrs. Z. Viljoen 04353498

Submitted in partial fulfilment of the requirements for the degree

MCom (Taxation)

in the

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

at the

UNIVERSITY OF PRETORIA

Supervisor: Professor T.L. Steyn

Date of submission: **2017-10-30**

ACKNOWLEDGEMENTS

I want to thank my wonderful and awesome God for giving me the strength every day. Thank you to my husband for being my rock. Thank you to my brother, Wian, for always giving insights and opinions. Lastly, thank you to my parents and baby brother for always being supportive and understanding.

ABSTRACT

AN EXPLORATORY STUDY OF THE TAX FAIRNESS DIMENSIONS OF INDIVIDUAL TAXPAYERS IN SOUTH AFRICA

By

NAME AND SURNAME: Zarené Viljoen

SUPERVISOR: Professor Theuns Steyn

DEPARTMENT: Department of Taxation

DEGREE: MCom Taxation

COURSE CODE: 07250182

Background: The fairness of the tax burden is a longstanding topic for research studies. People's perceptions around the fairness of the tax burden also frequently emerge from these studies. More recent studies support a notion that the phenomenon of tax fairness is multidimensional and the following five dimensions are well recognised in the literature: exchange with government; tax rate structure; self-interest; special provisions; and general provisions. Each one of these dimensions comprise various variables, all of which may have an influence on the tax fairness perceptions of taxpayers.

Main purpose: The main purpose of this study is to empirically explore the multidimensional variables that may influence individual taxpayers' perceptions of the fairness of the tax burden in South Africa.

Method: This study adopts a pragmatic style of thinking, it is exploratory in nature and takes on a deductive reasoning stance. The research in the study is cross-sectional and the method is mainly qualitative, making use of a thematic analysis as research strategy. The data underpinning the research can be classified as secondary data and comprise of both quantitative and qualitative data. The data were analysed thematically and the results are presented statistically, specifically in the format of descriptive statistics.

Results: The results from the data analysis in this study indicate that there are no statistically significant relationships between the five dimensions as stated above. However, the most profound dimension identified was that of the tax rate structure.

Conclusion: This study attempts to provide as an add to the literature, providing a stepping stone for future studies which may assist tax policy-makers to understand the present perceptions of individual taxpayers on the fairness of the tax burden in South Africa.

Key words: Tax fairness, Dimensions, Perception, Individual taxpayer, Tax burden.

TABLE OF CONTENT

ACKNO'	WLEDGEMENTS			
ABSTRA	ACT	II		
LIST OF FIGURES				
LIST OF	TABLES	VI		
DEFINIT	TION OF KEY TERMS	VII		
LIST OF	ABBREVIATIONS AND ACRONYMS	VII		
CHAPTE	ER 1: INTRODUCTION	1		
1.1.	BACKGROUND	1		
1.2.	RATIONALE FOR THE STUDY	2		
1.3.	PROBLEM STATEMENT	5		
1.4.	RESEARCH QUESTION	7		
1.5.	RESEARCH OBJECTIVES	7		
1.6.	IMPORTANCE OF THE STUDY	7		
1.7. LIMITATIONS OF THE STUDY				
1.8.	RESEARCH DESIGN AND METHODOLOGY	8		
1.9.	STRUCTURE OF THE MINI-DISSERTATION	9		
CHAPTER 2: THEORETICAL FRAMEWORK		11		
2.1.	BACKGROUND	11		
2.2. LITERATURE REVIEW				
2.3.	FAIRNESS AS A CONSTRUCT	14		
2.4.	FAIRNESS DIMENSIONS	17		
2.5.	SUMMARY	21		
CHAPTE	ER 3: RESEARCH DESIGN AND METHODOLOGY	22		
3.1.	INTRODUCTION	22		
3.2.	RESEARCH DESIGN	22		
3.3.	RESEARCH METHODOLOGY	25		
3.4.	DATABASE	26		
3.5.	3.5. RESEARCH ETHICS			
3.6.	CONCLUSION	28		
CHAPTE	ER 4: DATA ANALYSIS	30		
4.1.	INTRODUCTION	30		
4.2.	ORIENTATION OF THE DATA-ANALYSIS TECHNIQUE	30		

4.3.	DATA CODING	31		
4.4.	DESCRIPTIVE STATISTICS	32		
4.5.	PRESENTATION AND DISCUSSION OF RESULTS	40		
4.6.	CONCLUSION	50		
CHAPTE	R 5: CONCLUSION	52		
5.1.	INTRODUCTION	52		
5.2.	SUMMARY OF FINDINGS AND CONCLUSION	52		
5.3.	LIMITATIONS	53		
5.4.	FUTURE RESEARCH	54		
5.5.	CONCLUDING REMARKS	54		
LIST OF REFERENCES 55				
APPENDIX A: DATA CODING 61				
APPENDIX B: DECLARATION OF PLAGIARISM 65				

LIST OF FIGURES

Figure 1:	Figure 1: Language distribution				
Figure 2: Language distribution					
Figure 3:	Figure 3: Gender distribution				
Figure 4: Dimensions distribution					
Figure 5: Dimensions per language					
Figure 6: Dimensions per age group					
Figure 7: Dimensions per gender					
	LIST OF TABLES				
Table 1: I	Definition of key terms used in this document	vii			
Table 2: /	Abbreviations and acronyms used in this document	vii			
Table 3: I	Language	33			
Table 4: /	Table 4: Age groups				
Table 5: Gender					
Table 6: Dimensions					
Table 7: I	Table 7: Dimensions and language				
Table 8: \$	Table 8: Symmetric Measures				
Table 9: I	Dimensions and age groups	46			
Table 10:	Table 10: Symmetric Measures				
Table 11:	Table 11: Dimensions and gender				
Table 12:	Fable 12: Symmetric Measures				

DEFINITION OF KEY TERMS

Table 1: Definition of key terms used in this document

Key term	<u>Definition</u>
Perception	A person's interpretation or impression of things, by becoming aware of your understanding or others' opinions.
Self-assessment	The manner of submitting ones tax return, where one determines the tax liability, as opposed to SARS determining your tax liability.
Tax avoidance	Legally arranging ones affairs in such a way get a 'tax benefit'.
Tax benefit	As defined in section 1 of the Income Tax Act (58/1962): Any avoidance, postponement or reduction of any liability for tax. The South African courts clarified this to mean: to get out of the way of, or escape, or prevent a liability for tax, that the taxpayer anticipates, will or may, fall on him in the future (<i>Smith v Commissioner for Inland Revenue</i> , 1964 (1) SA 324 (A); <i>Hicklin v SIR</i> , 1980 (1) SA 481 (A) (41 SATC 179)).
Tax compliance	To be in a position to receive a tax clearance certificate from the tax authorities.
Tax evasion	Not paying the tax legally due to the revenue authority.
Taxpayer	Any person who should conform to the South African Income Tax Act No, 58 of 1962.

LIST OF ABBREVIATIONS AND ACRONYMS

Table 2: Abbreviations and acronyms used in this document

<u>Abbreviation</u>	<u>Meaning</u>
CEO	Chief Executive Officer
GDP	Gross Domestic Product
et al.	And others
ed(s).	Editor(s)
OECD	Organisation for Economic Co-operation and Development
SARS	South African Revenue Service
SPSS	Statistical Package for the Social Sciences
USA	United States of America

CHAPTER 1: INTRODUCTION

1.1. BACKGROUND

The concept of tax fairness has been addressed by many courts of law across the globe. Contradictory verdicts have been ruled, specifically around whether a court of law has a mandate to decide whether a disputed tax statute has a fair or unfair outcome on the taxpayer (*Pienaar Brothers (Pty) Ltd v Commissioner for the South African Revenue Service (CSARS) and Another*, 2017 SA 231 (HC)).

For instance, in the United States of America (USA), it is precedent that taxpayers do not have rights as regard to when policy makers decide to change the current tax statutes (*US v Carlton*, 1994 (26) US 512 (CA)). In Brittan, the courts can decide the spirit of the law. This is mainly driven by assessing the degree of fairness of the outcome of the tax amendment in the greater scheme of things. Lord Mustill (*Secretary of State for Social Security and Another v Tunnicliffe*, 1991 (2) ALL ER 712 (CA)) acknowledges that there are multiple influences upon fairness, and that a one-fits-all solution cannot be applied in tax, in order to achieve fairness. In Canada, courts have used a fairness test, which involves assessing the overall benefit of a tax statute and weighing it up with the unfair outcome thereof, however fairness as a construct is overridden by policy makers'- and society's needs (in *Pienaar Brothers (Pty) Ltd v CSARS*).

The South African high court referred to the latter international principles as persuasive evidence, in order to conclude on the dispute between the South African Revenue Service (SARS) and Pienaar Brothers (Pty) Ltd. In *Pienaar Brothers (Pty) Ltd v CSARS*, the applicant's main prayer was to consider the fairness of the outcome of a retrospective change in a tax statute, as a basis for declaring the amendment unlawful. SARS asserted that, once an amendment to the tax legislation had followed all the proper procedures of consultation and enactment, it cannot be said to be unjust, purely due to a handful of taxpayers resulted in an unfair outcome. The judge agreed with SARS, and based his ruling

on an Australian case which dealt with the mandate of a court of law, which does not involve assessing how tax morality is perceived.

Academic research, on the other hand, have provided compelling evidence of taxpayers' perceptions of fairness, which are associated with tax evasion and compliance (Richardson, 2006:31; Azmi & Perumal, 2008:11; Saeed & Shah, 2011:13559). Adam Smith ([1776] 1817:677) introduced fairness (also generally referred to as equity) as one of the key principles of a good tax policy. South African courts of laws may not consider fairness in assessing a legally enacted tax statute (*Pienaar Brothers (Pty) Ltd v CSARS*) and hence South African policy makers need to be more attentive to tax fairness principles during policy change consideration.

1.2. RATIONALE FOR THE STUDY

The debate around the fairness of taxes has a rich history. During the late seventeen hundreds Adam Smith ([1776] 1817) stated that the fairness principle is one of the key characteristics of a good tax policy. During the late eighties, Gerbing (1988) was one of the first researchers to explore the dimensions of tax fairness by way of a survey and statistical analysis. She formulated an initial theoretical framework for exploring the phenomenon of tax fairness. Richardson (2006) used Gerbing's framework as theoretical basis to perform a survey from which the results confirmed the dimensions proposed by Gerbing (1988), namely general fairness, self-interest, special provision for wealthy, tax rate and exchange with government. Azmi and Perumal (2008) in turn adopted Richardson's (2006) and Gerbing's (1988) framework, and modified it to suit their study to conduct a factor analysis on these five dimensions of tax fairness.

Saad (2010) found a relationship between fairness perception and tax compliance, together with demographic influences. Saad (2011) conducted a comparative study, across two studies, to determine behavioural similarities or differences that influence perception of tax fairness dimensions. In the light of tax fairness, Saeed and Shah (2011) explored the possibilities of using marketing tactics to boost tax morale. Hennighausen and Heinemann (2010) focused only on the self-interest and tax rate structure dimension of tax fairness.

Benk, Budak and Cakmak (2012) identified six dimensions of tax fairness in Turkey, of which four are similar to the ones identified by Azmi and Perumal's (2008), namely general fairness, special provisions, tax rate, exchange with government. The other two dimensions are middle income earners tax burden and tax system inequality. Abdul-Razak and Adafula (2013) conducted a study to link tax compliance with tax fairness in emerging countries. Cornelissen, Himmler and Koenig (2013) in turn explored the consequences of perceptions around tax fairness, and concluded that it may have detrimental effects on the economy of a country.

Engida and Baisa (2014) included tax fairness, as one of the variables, in a study to determine the impact of various variables on tax compliance. The results of their study did not support a significant correlation. Conversely, the results of Çevik's (2014) found that social norms, such as tax fairness perceptions, influence tax compliance behaviours.

Koumbiadis, Pandit and Ritsatos's (2014) study explored taxpayers' behaviour in the context of sociology, concerning tax compliance and tax evasion, and their results provided compelling evidence that tax fairness perceptions, as one of the variables, contribute towards tax evasion behaviour. Piketty, Saez and Stantcheva (2014:269) argued that tax fairness was one of the major influencing variables for the advancement of a progressive tax rate structure in developed countries, and anticipated that it will continue to influence the quantum of the highest tax brackets.

Valletta (2014) found that tax fairness perceptions influenced determining variables of a tax system, specifically around employment taxes and health related spending. Sofian (2014) provided empirical evidence that tax fairness is one of the variables that drive tax compliance. Belay and Viswanadham (2014) confirmed that tax fairness concept is multidimensional, in an Ethiopian setting, and has a significant relationship with tax compliance behaviour.

Cohen, Manzon and Zamora (2015) explored the effects of social norms on taxpayers' decision making. Their investigation was set to see if the taxpayer classified an in- or outflow of funds as either revenue or capital. The conclusion was that tax fairness perceptions can influence the characterisation of income or expenses as either capital or revenue in nature.

Farrar (2015) explored the Bill of Rights of taxpayers in Canada, and found that the perception of tax fairness is associated with the level of tax compliance.

Vythelingum, Soondram and Jugurnath (2017) explored the correlation between tax morale and tax fairness in Mauritius, they found that tax fairness formed an intricate part of tax morale. The topic of tax fairness have been discussed and explored internationally, and to an extent in South Africa.

In South Africa, Maroun, Turner and Coldwell (2014) considered tax fairness in light of capital gains tax, exploring the perception of fairness for introducing this regime with reference to the underlying policy intention. The underlying intention were to uplift the previously disadvantaged and the perceived double taxation effect thereof. The results of their study indicated that tax fairness was perceived to be a secondary point of reference when introducing a new tax policy in South Africa, which has been dominated by political agendas. Muli and Steyn (2015) found that the perception of tax fairness influences individual South African taxpayers' subjective assessment of their tax burden.

Steyn (2015) formulated a conceptual framework for evaluating the total tax burden of individual taxpayers, focussing his research on individuals in South Africa. Steyn's (2015) proposed conceptual framework provides for the objective measurement of the impost tax burden and also for the subjective measurement of the tax burden as it is perceived by an individual. On the subjective side, tax fairness perception was highlighted as one of the key dimensions for measuring the tax burden.

Du Preez (2015) found that the definition of tax fairness differs depending on the point of view of each of the respondents in her study. The Davis Tax Committee (Davis Tax Committee, 2016) was appointed in South Africa to investigate the policy principles of a good tax system. Recently, they submitted a report to the National Treasury for their consideration in policy design, which stated that fairness is an important variable to measure taxpayers' voluntary compliance behaviour. This cannot be considered in isolation, as it is important to also acknowledge whether Government's spending is equitable and justifiable (Davis Tax Committee, 2016:5).

1.3. PROBLEM STATEMENT

Amongst all tax types, there are three main sources of tax revenue in South Africa, namely personal Income Tax, Value-added Tax and corporate Income Tax (National Treasury and the South African Revenue Service, 2016:viii). As a percentage of GDP in 2016, personal Income Tax is the largest contributor to the National Revenue Fund (approximately 10%), followed by Value-added Tax (approximately 7%) and then by corporate Income Tax (approximately 5%) (Momoniat, 2017:4). Despite personal Income Tax being the largest contributor to tax revenue in South Africa, Momoniat (2017:7) indicated that an approximate R15 billion shortfall has been reported (which is the largest of all tax types) when comparing the actual 2016 results to the 2016 budget. It is Momoniat's (2017:7) view that tax morality, amongst other variables, could pose a risk for a decreasing total tax contribution towards the National Revenue Fund in the coming years.

A study by Piketty *et al.* (2014) proved that high-income earners' gross income increased significantly as soon as a rate decreased was declared for the top-bracket of the personal Income Tax scale. The top bracket of personal Income Tax rates were as high as 90% in United States of America and United Kingdom. It was further found that CEO's, who fell into this high tax bracket, were less inclined to fight for an increase on their salary. However, when the tax rates fell, they took a much more aggressive stance towards salary increases. The conclusion is that high-income earners will find aggressive ways to avoid tax when it is at its peak (Piketty *et al.*, 2014:268).

South Africa's 'super tax bracket' of 45% on taxable income above R1.5 million, is introduced by the Minister of Finance, during the 2017 budget speech. This would mean that 6.6% of taxpayers will contribute 50% of the personal income tax revenue per year, which is the highest effective tax rate since 1994 (Fin24, 2017a). If the model developed by Piketty *et al.* (2014), is applied to South Africa, this could mean that tax avoidance will remain to increase, and maybe even more aggressively so.

It is a common assumption in literature that the perception of tax fairness in a country is associated to tax evasion, tax avoidance and tax compliance (Richardson, 2006:31; Azmi &

Perumal, 2008:11). More so, when the perception of a tax system is unfair, taxpayers are more likely to evade taxes (Oberholzer, 2007:23; Saeed & Shah, 2011:13559).

Oberholzer (2007), addressed tax fairness as a principle in a narrower sense, which was only focussed on people's opinion if tax is fair or not. Her study only contained a close-ended question, probing South African taxpayers, to state whether or not they agree that it is unfair to pay tax. The majority of respondents (73.46%) stated that it is fair to pay tax, 16.54% agreed paying tax is not fair and 10% reserved their opinion (Oberholzer, 2007:18). These results can provide a misleading stance on the perception of tax fairness in South Africa, as this question addresses many dimensions of tax fairness at once, and could be distorted by all the dimensions that influence the stance taken by the respondent (Gerbing, 1988:4).

Furthermore, Oberholzer's (2007) study does not allow the respondent to answer any openended question to provide a reason for their position taken. However, her study revealed that 40.38% of the respondents would omit some of their income from their tax return, if a tax practitioner advised them to do so. A percentage of 31.54% would not be deterred by a prospective employer, if they were offered not to deduct pay-as-you earn from their monthly salary, despite knowing that it is not in compliance of the law (Oberholzer, 2007:22).

Literature shows that tax fairness is a multidimensional concept, which means that there could be many reasons why the respondents provided their statements (Jackson & Milliron, 1986; Christensen, Weihrich & Gerbing, 1994; Azmi & Perumal, 2008:12; Saad, 2011: 71; Farrar, 2015:77). No research have been found, which determines the context in which South African taxpayers opine whether or not it is fair to pay tax. The question "... is it unfair to pay tax ..." can be classified into a few dimensions, depending on the attitude of the respondent at the time of completing the survey.

A wide-ranging search have been performed on the database of all South African theses and dissertations on the National ETD Portal, Google Scholar and Ebscohost indicated that no quantitative analysis studies have yet been performed to determine what individual taxpayers' reasons are why they conclude that the tax in South Africa is fair or unfair.

Hence, there is a need to explore the originating dimensions that underpin tax fairness perceptions of individual taxpayers in South Africa

1.4. RESEARCH QUESTION

The research problem, as stated in the previous section is formulated into a research question in this section and will guide the rest of this study.

The question focussing the research in this study is: What are the relation between demographic variables and the dimensions of the tax burden fairness perceptions of individual taxpayers in South Africa?

1.5. RESEARCH OBJECTIVES

The primary research objective of the present study is to explore the relationship between specific demographic variables, namely age group, language and gender, and the tax burden fairness dimensions as perceived by individual taxpayers' in South Africa.

The secondary objectives are supportive of the primary objective and are presented below:

- To formulate a framework as theoretical underpinning for the research from recognised tax fairness dimensions in the existing literature.
- To describe the research design and methodology used in this study in order to perform an empirical exploration of the dimensions influencing the tax fairness perceptions of individual taxpayers in South Africa.
- To analyse existing empirical data and to present the results.
- To conclude on the results of this study and in addition, making recommendations for future studies and pointing out important limitations.

1.6. IMPORTANCE OF THE STUDY

Various studies have shown that the perception of tax fairness is associated with tax compliance (Azmi & Perumal, 2008:11; Saeed and Shah, 2011:13559; Farrar, 2015:73). South African taxpayers' behaviour may in essence be very similar to indicators present in

historical tax revolts (fin24, 2017b). Therefore, it is important that tax role-players in South Africa, such as tax policy makers at the National Treasury and SARS, take cognisance of these indicators. Other tax role-players in South Africa that provide input to the tax policy makers, for example the Davis Tax Committee or political parties, may also find the results of this study to be important determinants in their decision-making processes.

Moreover, this study may also contribute towards the body of literature related to the tax fairness perceptions.

1.7. LIMITATIONS OF THE STUDY

The more important limitations to consider in this study are summarised below:

- The research in the study focuses only on the individual taxpayers in South Africa and is therefore not representative of other taxpayers such as trusts, corporates, and small to medium enterprises.
- The research focuses on South Africa, and due to cultural differences, the results of this study may not be relevant to other countries.
- The data used in this study are biased towards the English and Afrikaans languages, in lieu of the other nine officially recognised languages in South Africa.

1.8. RESEARCH DESIGN AND METHODOLOGY

This study aims to explore what the demographic variables are that influence individual taxpayers' perceptions on dimensions of fairness of the tax burden in South Africa. To pursue this aim the following research design and methodology was adopted:

The study commences with a review of the relevant literature to establish and to clarify the theoretical framework underpinning for the study. This is followed by a qualitative research methodology, making use of secondary data sources to explore the demographical variables that may influence the dimensions of tax fairness perceptions in South Africa.

This study adopts a pragmatic style of thinking, it is exploratory in nature and takes on a deductive reasoning stance. The research in the study is cross-sectional and the method is

mainly qualitative, making use of a thematic analysis as research strategy. The data underpinning the research can be classified as secondary data and comprise of both quantitative and qualitative data. The data were analysed thematically and the results are presented statistically, specifically in the format of descriptive statistics.

1.9. STRUCTURE OF THE MINI-DISSERTATION

The main outcomes of the current study are presented in the format of a mini-dissertation. The structure of the mini-dissertation is explained and summarised below.

1.9.1. Chapter 1: Introduction

Chapter 1 provides an introduction and background to the present research and also sets out the research question. The rationale for the present research is discussed, the assumptions and limitation of the present research are explained and the research design and methodology are briefly summarised.

1.9.2. Chapter 2: Theoretical framework

Chapter 2 identifies and defines an overview of existing literature on tax fairness as a construct and one of the principles in a tax policy, and which are expected to be used by tax policy makers in South Africa and worldwide. To provide clarity on exactly what is explored in this study, as well as what different dimensions of tax fairness exist in literature and are widely accepted. A brief discussion on available literature is examined with regards to fairness as a construct.

1.9.3. Chapter 3: Research design and methodology

Chapter 3 provides a thorough explanation of the research methodology used in the present research. This chapter commences with the research orientation, provides detailed information about the data used describes the research design which sets out the blue print of this study, further detail is discussed around which research methodologies are used to analyse and explore the primary data.

1.9.4. Chapter 4: Data analysis and discussion

Chapter 4 clarifies the data analysis technique, also presenting and discussing the results of the data analysis.

1.9.5. Chapter 5: Conclusion

Chapter 5 concludes on the study. The chapter summarises the findings and conclusions from the other chapters, explains the contribution and limitations of the present study, and also makes suggestions for future research.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1. BACKGROUND

The main purpose of this study is to explore the various dimensions of tax fairness and certain demographical aspects of taxpayers, which can have an influence on an individual taxpayers' perception of the fairness of their tax burden in South Africa. The purpose of this chapter is to review and analyse the literature for background and theories with regards to tax fairness and to reveal the gaps that exist in South African literature within the context of the existing literature.

This chapter commences with a literature review to set the context of this study. This is followed by delving into more detail around fairness as a construct. The chapter then proceeds to describe each of the common dimensions of tax fairness. Finally, the chapter provides a brief conclusion.

2.2. LITERATURE REVIEW

From as early as the times before the crucifixion of Jesus Christ, the Bible (Matthew 22:17-21 in the Bible, 1995) speaks of instances where the people wanted to pay as little taxes as possible, and throughout the Bible it refers to one has to give tithes, which is one tenth of all earnings during the year, to God (the church) (Deuteronomy 14:22; Leviticus 27:32; 1 Samuel 8:15; and Nehemiah 10:37 in the Bible, 1995).

A recent study has been conducted where it was found that as much as USD 7,6 trillion, which is approximately 8% of the world's wealth, is held in tax-friendly countries, or as the Organisation for Economic Co-operation and Development (OECD) (2001:7) would classify it, tax havens (Johnston, 2015).

During an interactive session with American Chamber of Commerce, the presenter raised the points around trade-offs that need to be considered between the five principles of tax, specifically between equity and efficiency, when designing a tax policy. With regards to efficiency, the tax policy in South Africa is to minimise the distortions created by legislation, that allow taxpayers to structure their affairs in order to avoid tax, and to broaden the tax base in order to be able to keep the tax rates as low as possible. Furthermore, it is important to balance these objectives with the equity principle, which is to maintain the tax system at a progressive status (Momoniat, 2017:3).

Miller's (2014:397) study demonstrated that, striking a balance between implementing attractive policies, and, simultaneously preventing unacceptable tax avoidance, is a continuous challenge that arises during the design process of tax systems. Working towards a preferential tax incentive may cause a country more harm than good, and therefore the balancing act remains a challenge.

There are three main sources of tax revenue in South Africa. As a percentage of GDP in 2016, personal income tax was the largest contributor (approximately 10%), followed by value-added tax (approximately 7%) and lastly corporate income tax (approximately 5%), this status quo has remained since 2002. Despite personal income tax being the largest contributor to tax revenue in South Africa, it reported an actual R15 billion shortfall (largest of all tax types) when comparing it to the 2016 budgeted tax revenue. Tax morality, amongst others, is a risk that can cause this shortfall to accumulate in the future (Momoniat, 2017:4-17).

National Treasury is continuously closing loopholes to combat tax avoidance, and therefore minimising the taxpayer's ability to plan their legislative tax liability. It is clear that individual taxpayers are fundamental to the total tax revenue in South Africa and keeping the tax morality at a healthy level is important in order for taxpayers to be compliant, and to enable the government to achieve budgeted targets which is set by the Finance Minister.

It is SARS' philosophy to address the historical and prevalent environment of non-compliance in South Africa. SARS acknowledge that there are various demographical influences that affect taxpayers' compliance behaviour, such as values and norms, therefore SARS commit themselves to design, implement and manage the tax system in such a manner to boost the perceptions of fairness. It is also acknowledged that tax compliance is

negatively influenced due to the increased perception of a corrupt and inefficient government (South African Revenue Service, 2016:34).

Contradictory, Van der Walt (2014) is of the opinion that tax morality and taxpayers having to pay their fair share of taxes, are debates that belong in Parliament, and that the true tax liability is based on the legislation. As true as this is, there are over 10 million registered individual taxpayers in South Africa (National Treasury, 2013), at which point, SARS has to rely on the honesty of these individuals or their tax practitioners, to comply with the complex legislation, especially in light of the movement towards a self-assessment regime planned to be implemented soon. This movement is in line with international trends and relies on voluntary compliance of the taxpayer (Memorandum on the Objects of Tax Administration Laws Amendment Bill, 2014:38).

The fairness of South Africa's tax system is weakened when taxpayers (both individuals and businesses) are able to structure their affairs in such a way which would result in tax avoidance, however most of these loopholes have been closed over the years (Momoniat, 2017:17). The author of the book, Rich Dad Poor Dad, Kiyosaki (2009) is of the view, which is contrary to South Africa's current personal income tax regime. South Africa's current regime is, the more your taxable income, the higher the applicable tax bracket will apply, which is classified as a progressive tax regime. The author, Kiyosaki (2009), believes the less taxable income one presents, the more taxes one should be pay, as a form of penalty for being unproductive.

In as early as 1776, Adam Smith ([1776] 1817:677) referred to four maxims which should exist in any tax policy. The first maxim addresses the 'ability-to-pay' principle, also described in more recent literature as vertical fairness, which means that persons should be taxed differently depending on their economic circumstances (Kirchler, Niemirowski & Wearing, 2006). The second maxim talks about the necessity of certainty in a tax system, where a taxpayer can predict their tax liability with great certainty, as the absence of this can lead to much evil. The third maxim addresses the timing of tax payments to be convenient for the taxpayer. The last maxim addresses 'cost-vs-benefit' principle, which do not necessarily address tax itself, but rather the burdens of collection and compliance that come with it, in comparison to the benefits received by the state.

In order to measure the tax morality, it is necessary to get an understanding of what the dimensions are that influence an individual taxpayer's perception of fairness.

The study performed by Oberholzer (2007:18) in which a close-ended question was posed to South African taxpayers, in which they had to state whether or not they agree that it is unfair to pay tax. 73.46% stated that they disagree with the statement, 16.54% agreed with the statement and 10% had no opinion regarding the statement. Oberholzer's (2007) study does not allow the respondent to provide open-ended reasons for the position taken to either agree or disagree that it is unfair to pay tax. No research has been done to determine in what context South African taxpayers are of the opinion that it is fair or unfair to pay tax in South Africa.

The section to follow will set out tax fairness, as a construct, in more detail.

2.3. FAIRNESS AS A CONSTRUCT

Equality has been considered in the design of any tax type (direct and indirect, wealth and labour taxes), from as early as 1776 by Adam Smith ([1776] 1817:667). More recent researchers use Adam Smith's theories to explore the framework of a tax system for its fairness element (Saad, 2011:70; Du Preez, 2015:74-76; Steyn, 2015:25).

The Oxford English Dictionary (not dated) defines fairness to be: "... Honesty; impartiality, equitableness, justness; fair dealing ..." However, tax fairness is difficult to define as it can be observed at a micro level (individual) or at a macro level (society) (Azmi & Permual, 2008:12). Fairness is also a subjective concept and is defined differently depending a person's point of view (Gerbing, 1988:vii; Du Preez, 2015:162).

Researchers have conducted empirical tests to statistically prove that the tax fairness concept is multi-dimensional (Gerbing, 1988; Christensen *et al.*, 1994; Christensen & Weihrich, 1996; Azmi & Perumal, 2008; Saad, 2011; Benk *et al.*, 2012).

Tax fairness is associated with complexity, and results from previous studies indicate that, when taxpayers perceive a tax system to be unfair, or perceive reckless spending of tax revenue by governments, they tend to want to justify their tax evasion and aggressive tax avoidance tactics, or they simply do not comply with the tax legislation (Richardson, 2006:31, Azmi & Perumal 2008:11; Saeed & Shah, 2011:13559).

Steyn (2015:143) referred to a social justice study performed by Kirchler (2007:75-76) where it was found that there are three profound dimensions reflected in this discipline, which are, distributive fairness, followed by procedural fairness and lastly, retributive fairness.

2.3.1. Distributive fairness

Distributive fairness comprises of equity exchange, vertical fairness and horizontal fairness. Furthermore, distributive fairness is the most widely accepted construct of fairness in the realm of social justice research (Steyn, 2015:143). Therefore, this study is focused on distributive fairness.

Du Preez (2015:197) suggests that for a tax system to appear as equitable, the concept of distributive fairness should be the ultimate outcome. This means that tax collections should be redistributed to society in order for the society to be self-sustainable. From a different perspective, Vermeulen and Coetzee (2006:54) described distributive fairness as a construct, whether an outcome of affirmative action in South Africa is perceived to be fair. These authors described that distributive fairness can be sub-divided in three categories, namely: need, equity and equality. That study demonstrated that there is an important difference between equity and equality. Equity focusses on the fairness of an outcome, by evaluating and comparing the inputs of the different individuals. On the other hand, equality is focused to achieve a fair outcome, which should be the same outcome for all individuals and disregards any inputs made by those individuals (Vermeulen & Coetzee; 2006:54).

Gerbing (1988:32) recognises vertical fairness as a construct, but further suggests, and empirically proves, that vertical fairness has sub-dimensions, such as tax rate structure and special tax dispensations. Jackson & Milliron (1986) added the concept of horizontal fairness to the definition of the multidimensional concept of tax fairness. Horizontal fairness is

focussing on having the same outcome for those taxpayers with similar inputs. However, Benk *et al.* (2012:113) suggest that horizontal fairness are often not considered by tax policy makers due to other influences such as political agendas, economic and social needs.

2.3.2. Procedural fairness

Farrar (2015:72) recognised that procedural fairness was discovered only much later than the initial existence of distributive fairness. Procedural fairness comprises of the tax collection process, confidence in the tax process and the complexity of the tax system, therefore the focus on procedural fairness is how to practically implement the distribution of a country's tax revenue funds (Steyn, 2015:143). An example of procedural fairness is to have processes and procedures in place in order for an aggrieved taxpayer to formally lodge objections and appeals, within reasonable timeframes (Farrar, 2015:73).

Hennighausen and Heinemann (2010) suggested that procedural fairness relates to taxpayers' sense of approval of the democracy regarding the tax a country, and when the perception of procedural fairness is positive it fosters trust of voters in the tax system and to use the taxpayers' money appropriately. This leads to more willingness to pay higher taxes. Procedural fairness perception is also found to be associated with the taxpayer's compliance behaviours (Farrar, 2015:73).

This study does not consider procedural justice perceptions of fairness. The results from the current study also did not allude to any such dimensions. Future studies can include a more steering questionnaire to address procedural fairness as well as informational and interpersonal fairness, in order to explore the perceptions of taxpayers specifically relating to these three fairness dimensions. There might be an inter-dimensional association between the five dimensions explored in this study and those dimensions identified.

2.3.3. Retributive fairness

Retributive fairness comprises of the treatment of a taxpayer's action when they did not comply with a country's tax legislation, such as fair corrective measures taken by the tax authorities as a reaction to such rule-breaking behaviour (Steyn, 2015:143).

2.4. FAIRNESS DIMENSIONS

A study performed in Canada on the taxpayer charter implemented in that country, as recommended by the OECD, addresses four different tax fairness dimensions. These are: procedural fairness, distributive fairness, informational and interpersonal fairness (Farrar, 2015:72). The study performed by Du Preez (2015:74-76) examined the principles of tax policy of which equity/fairness is widely acknowledged as one of them. Du Preez (2015:162) acknowledges three dimensions of tax fairness, which are horizontal and vertical fairness as well as individual fairness. Saad (2011) discovered that New Zealand taxpayer's dimensions are general fairness, exchange with government, horizontal fairness, retributive fairness and administrative fairness.

Benk *et al.* (2012:112) and Richardson (2006:39) discovered that taxpayers in Turkey, with the unit of analysis as tax professionals, have six main dimensions of tax fairness. These are general tax fairness, exchange with government, special tax provisions, tax rate structure, tax system equality and tax burden of middle income earners. Benk *et al.* (2012:114) used factor analysis based on Gilligan and Richardson's (2005) tax fairness model.

Gerbing (1988:vii) found four main dimensions of tax fairness in the United States (US), which are: general fairness; exchange with government; tax rate structure; and special tax advantages of certain taxpayers (vertical fairness). An additional dimension was found by Christensen *et al.* (1994), when surveying tax students, called self-interest. However, self-interest was noted as one of the other concepts of fairness, but did not classify it as a separate dimension. Christensen & Weihrich (1996) found the same dimensions as identified by Christensen *et al.* (1994), when surveying tax professionals.

Azmi and Perumal (2008:18) found that Gerbing's (1988) dimensions are also significant in an Asian context, however only three major dimensions came from the empirical study, which are general fairness, tax structure and self-interest. The authors used Richardson' (2006) tax model and modified it. The reasons for the differences might be due to the vast difference cultures between Asia and the US.

Gerbing (1988:vii) suggested that due to the concept of fairness depending on the point of view of the taxpayer, the concept of fairness should be considering the different demographics of a taxpayer.

Various demographics were considered during the empirical analysis, such as age, income level, gender, education, employment status, and occupation (Gerbing, 1988: 54). Azmi & Perumal (2008) used similar demographic measurements as Gerbing (1988), however excluded the level of income and occupation. Richardson (2006:32), who also explored the dimensions in an Asian setting, only used demographic control variables, such as age, gender, education, and occupation.

Saad (2011) considered demographic elements similar to Gerbing (1988) but expanded the demographic ranges to ethnicity, marital status, number of dependents and experience with the revenue authority. Farrar (2015) considered demographics similar to Gerbing (1988) except for employment status and occupation, and expanded the demographics to include the taxpayers various experiences with the revenue authority. These experiences alluded to the focus of the study being towards more procedural fairness than distributive fairness.

Hennighausen and Heinemann (2010) explored demographic statuses such as gender and age, similarly than all the other authors. However, other unique demographics such as beliefs, marital status, social differences, level of tax education, and being employed by the government or in the private sector. In this study it was found that the demographic variable relating to the marital status of a taxpayer does not significantly impact the perception of fairness. However, it was found that the perception of fairness is strongly dependant on the life situation of the taxpayer (Hennighausen & Heinemann, 2010:279).

The present study adopts Gerbing's (1988) dimensions as the theoretical framework to explore the phenomenon of the perceived fairness of the tax burden in South Africa.

Exchange with government

The perception of fairness of the tax burden, from the perspective of comparing the benefits and services that are provided by the state to the general public, and specifically received by the taxpayer, are measured in terms of the total tax contribution paid. It is seldom perceived that tax is a form of buying public services (Azmi & Permural, 2008; Benk *et al.*, 2012, Richardson, 2006:31).

The high income earners tend to perceive that government spending is excessive in comparison to the benefits received (Gerbing, 1988:106).

2.4.1. Tax rate structure

The different tax rate structures are: progressive which means the higher taxable income is, the higher that rate will be; and a flat rate for all income levels.

Gerbing (1988:32) identified that the tax rate structure dimension is a form of vertical equity construct. Gerbing (1988:106) found that a statistically significant influencing variable for a taxpayer to assess their fairness, is their financial position together with the most beneficial outcome of a tax policy, example being that wealthy taxpayers would prefer a flat tax rate as they would pay less tax when compared to a progressive tax rate structure. Gerbing (1988:106) also found that the low income earners support a more progressive tax rate structure, and the more wealthy (high income earners) prefer a more flat tax rate structure.

However, contrary to Gerbing's (1988) findings, the study conducted in Germany (Hennighausen & Heinemann, 2010: 282) demonstrates a different conclusion, as all participating taxpayers, regardless of their income level, perceive that the tax system should be progressive as it is will result in a more fair outcome, despite knowing that it will be less beneficial for the wealthy. Hennighausen and Heinemann (2010:265), specifically found that females in Germany have a stronger preference for a progressive tax rate system.

Self interest

In the study conducted by Hennighausen and Heinemann (2010:277) it was statistically proven that self-interest is a separate (independent) measure of tax fairness than the tax-rate preference. The author recognises that self-interest dimension is not as narrow as only addressing the taxpayer's financial benefits. Self-interest is associated with the level of effort put in by a taxpayer to achieve success (Hennighausen & Heinemann, 2010:261). It further states that self-interest dimension is about assessing the vertical fairness of the tax burden (Hennighausen & Heinemann, 2010:256).

Richardson (2006:32) suggests that self-interest dimension depends on the culture of a nation, such as in an Asian setting, where civilians are dependent on groups of people, they are willing to sacrifice taxes for the benefit of the group.

In essence self-interest relates to the evaluation that the taxpayer makes upon the portion of tax paid based on his efforts and circumstances, compared to other taxpayers with less or similar circumstances, and speculates or knows what those taxpayers contribute in tax.

2.4.2. Special provisions

The special tax provisions are widely associated with the provisions that are available to only a few people or the wealthy, which can lower their tax burden as a result thereof (Richardson, 2006:35; Benk *et al.*, 2012:115).

Gerbing (1988:32) identified that special tax dispensation, is a sub-dimension of the vertical equity construct. The author further suggested that complexity of a tax system is linked to the special provisions, as the wealthy have the means to explore the act for loopholes and tax avoidance schemes. The latter concept is supported by the survey outcome of the study conducted by Robbins and Jeffords (2004:88), where it was found that customers are perceiving the service delivered by their tax practitioner to be fairer when the practitioner takes on an aggressive interpretation of the tax act.

High income earners are of the opinion that the special provisions do not give the wealthy an unfair advantage (Gerbing, 1988:106).

2.4.3. General provisions

General fairness depicts the perception of the overall fairness of the tax system and the total tax burden as distributed amongst all taxpayers, specifically from the point of view of the mediocre taxpayer (Richardson, 2006:34; Benk *et al.*, 2012:115). It also addresses the overall fairness of income tax as a separate tax and the broadness of the tax base, or how the burden is distributed (Benk *et al.*, 2012:115).

2.5. SUMMARY

The most occurring dimensions in literature are: general fairness, self-interest, tax rate structure, exchange with government and special tax provisions. The study will use the concepts of each of these dimensions to classify the results from the data collected by Steyn (2015).

Due to the subjectivity and overlapping nature of these dimensions, a different researcher can classify a respondent's results in a different dimension. However, to mitigate this risk, the framework as defined above was strictly applied. Another limitation is that there could have resulted other dimensions of tax fairness, which are not mentioned in this study.

The next chapter clarifies the research design and methodology adopted in this study to address the main purpose of this study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

This study's primary research objective is to explore the demographic variables that influence individual taxpayers' perceptions on the dimensions of fairness of the tax base in South Africa. The previous chapter unpacked the existing literature of the five dimensions of tax fairness. This chapter will explain in detail how the research objectives were accomplished, by outlining the research plan, which sets out the research design elements to describe what kind of study this is. Further in this chapter, the rationale for using the chosen methodology is discussed in detail, specifically addressing how the research objectives were achieved.

This chapter commences with the research design, followed by a discussion of the research methodology and unfolding the data collection process. Finally, a conclusion is reached.

3.2. RESEARCH DESIGN

The research design is the building plan of this study, which sets out the reasons for the methods adopted and how the research objectives were achieved (Saunders, 2009:43). Firstly, a description of the style of thinking that was used, is discussed, followed by an explanation of the nature of the study, the method of reasoning, time horizon covered, the unit of analysis, and sources and types of data used.

3.2.1. Philosophy

The philosophy adopted in a study sets the foundation of that study (Farquhar, 2012). It is the thinking style and the way the researcher interprets the facts derived from the data, in order to gain certain knowledge. The thinking style reveals a researcher's view and understanding of reality at a given point in time. There are four broad categories of philosophical perspectives, namely: Positivism, Realism, Interpretivism and Pragmatism

(Sekaran & Bougie, 2013:28). These thinking styles have an effect on what the researcher accepts as the truth, as well as how strictly the truth must be tested.

A Positivism perspective adopts the philosophical stance of a natural scientist, who believes that there is an objective truth out there which can be measured objectively and independently from human emotions. These researchers want to uncover the truth, by searching for regularities and casual relationships, in order to predict and control it and to generalise the findings. From a Realism perspective, the researcher believes that there is an objective truth out there, however it cannot be measured objectively as it is underpinned by human emotions. Such a researcher's goal is to progress towards the truth but knows that it is impossible to reach it, as the data is inherently flawed, due to the collection thereof being underpinned by subjective emotions. The goal is to explain the data in context (Sekaran & Bougie, 2013:29).

Researchers with an Interpretivism philosophical stance, acknowledge that the data is subjective in nature and want to understand the world from the perspective of people. The goal is not to generalise the outcome, but to understand and explain the outcome in depth (Sekaran & Bougie, 2013:29-30).

The thinking style adopted by a researcher with a Pragmatism philosophical stance, depends on the research question (Saunders, 2009:109). Saunders (2009:109) notes that a pragmatist believes that data can be collected from both an objective observable phenomena and from a subjective point of view. The goal is to uncover the practical relevance of knowledge gained from the data to the business problems, and knows that the results are only a provisional truth aimed at that point in time, which can change over time.

A pragmatism philosophy was used in this study, as a practical thinking style was adopted. The research question is addressed by exploring the demographic variables that influence individual taxpayers' perceptions of the dimensions of fairness of the tax burden in South Africa. The goal is to achieve an outcome that will have practical relevance to the fiscal problems that are faced in South Africa at a particular point in time.

The fiscal problems that are commonly faced by revenue authorities are tax avoidance through tax planning and tax evasion. An individual taxpayer's perception of the fairness of the tax burden is closely linked to their approach to tax compliance (Richardson, 2006:30; Azmi & Perumal, 2008:11). Exploring which variables influence an individual taxpayer's perception on the dimensions of fairness of the tax burden in South Africa reveals a reality at a particular point in time, which can be relevant to SARS' tax compliance problem.

3.2.2. Nature of the study

The purpose of the study determined the nature of the study, and the outcome of the research question was answered in either a descriptive, exploratory or explanatory way. The research question that is asked, therefore, determines what method to use (Saunders, 2009:138). In a study where the nature of a problem is uncertain, Saunders (2009:139) suggests that an exploratory study will be suitable for the researcher to clarify their understanding of the problem.

In this study, an exploratory approach was used to gain insights of the variables that influence an individual taxpayer's perception on the dimensions of fairness of the tax burden in South Africa. The reason for this choice is that no research had been done which specifically focused on the 'what' that could influence the perceptions of taxpayers', in order to conclude that the tax burden in South Africa is fair or unfair.

3.2.3. Reasoning

The three types of reasoning used to interpret data are by either working inductively or deductively, or using an abductive approach.

An inductive approach is to work from the data to develop a theory and afterwards relating it to existing literature. A deductive approach is used when a theoretical framework already exists and the researcher wants to test the data against that theory (Saunders, 2009:61). Lastly, an abductive reasoning is to follow and inductive approach first, to build a theory, and then to test the theory, by using a deductive approach (Farquhar, 2012).

In this study, the primary database was further developed by adding categories, based on the answers of the participants, within the realm of the five dimensions of tax fairness. A deductive working was used to explore the data and to see what theory surfaces and where appropriate, what associations could be drawn with the existing literature.

3.2.4. Time horizon

The survey was conducted at a particular point in time and is therefore a 'snap-shot' of the participants' perceptions at a given point in time, according to Saunders (2009:155) such a study is called a cross-sectional study.

3.2.5. Unit of analysis

The unit of analysis is specifically the 'what' or the 'who' from where the data will be collected from, also keeping in mind the research problem (Sekaran & Bougie, 2013:104-105). Adams, Khan, Raeside and White (2007) suggest that it is important to "... specify whether the level of investigation will focus on the collection of data about organisations, departments, work groups, individuals, or objects." This study focussed on individual taxpayers in South Africa.

3.2.6. Sources and types of data

The nature of the data is secondary and based on an existing database where Steyn (2015) collected the primary data through the open-ended question from a web-based survey, was used. The database is both of a quantitative and qualitative nature.

3.3. RESEARCH METHODOLOGY

The purpose of this study is to explore the variables that influence individual taxpayers' perception on the dimensions of fairness of the tax burden in South Africa. The aim is to contribute towards the existing theory related to Gerbing's (1988) five main dimensions of tax fairness. In order to achieve this purpose with valid and reliable results, the research method and strategy need to be designed with care (Saunders, 2009:542).

3.3.1. Research method

A mainly qualitative research method was used as the research strategy, namely a thematic analysis. This analysis is supported in the research by the conversion of the non-numerical information into numerical coded data, such as to quantify attitudes, opinions, behaviours, or other defined variables, or qualitise the quantitative data, by converting numerical data into narrative data (Saunders, 2009:152-153).

3.4. DATABASE

The present research uses information from an existing database to pursue the main objective of the study. This database originates from primary data collected by Steyn (2015). The sections below provide clarity on the data-collection strategy adopted by Steyn (2015), making use of a web-based survey in the format of a standardised questionnaire as the collection instrument.

3.4.1. Data collection instrument

A web-based survey, as a data collection instrument, involve certain web-based techniques to be followed. The way the web-based survey can reach the prospective participants is to send an invitation to the survey by using electronic media. The prospective participant can then go online to complete the electronic questionnaire (Daniel, 2011:191). These electronic questionnaire use online software that has the ability to collect the responses and combine it to one database.

There are ample benefits for using an online survey, such as the design of the survey is easy, the geographical reach can be very wide in a cost effective manner and the administration burden is much lighter (Sekaran & Bougie, 2013:147-148).

Using the web-based survey has certain limitations to it, such as the internet could not be accessible to all the prospective participants, therefore the data collection method could not be feasible to all populations. Furthermore, it is possible that even when the prospective

participant do have access to the online survey, they might not be as computer literate or comfortable to navigate the survey online or to respond. Lastly, the likelihood for a prospective participant to decide not to respond, is made much quicker, due to the fact that they will respond at a time most convenient for them and they must also have a willingness to respond (Sekaran & Bougie, 2013:147-148).

Robson (1993:228) suggests that, when designing each question, one should distinguish between questions that are aiming to determine the participant's knowledge, their behaviour, or their thoughts or feelings. A questionnaire can be designed by either posing open-ended or close ended questions, or a combination of the two. An open-ended question sets a platform for a participant to put their view down, without restrictions or guidance from the researcher. A close-ended question restricts the participant to a range of predetermined answers, which could create bias (Foddy, 1994:127-128). The questions included in Steyn's (2015) survey to collect data, were a combination of close- and open-ended questions.

The present research study utilised the data collected by Steyn's (2015) close-ended questions that provided the demographic variables under consideration. In turn, data from the open-ended questions were used in this research study to explore the dimensions of the participants' perceptions of tax fairness. The survey that was used, had an automated administration function, and contained standard questions.

3.4.2. Sample selection

This section provides clarity on the population and the sample selection strategy utilised by Steyn (2015).

The target population, as defined under the unit of analysis of this study, are individuals who pay tax in South Africa. As the number of registered individual taxpayers in South Africa, during the 2011 year of assessments, were roughly 10 million (National Treasury, 2012), the reach was very wide to select a sample within the population, which is why Steyn (2015) used a chain referral sampling technique.

The survey invitations were extended to a group of participants, who initially met the unit of analysis criteria, as defined in this study. These people were asked to further extend the invitations to other people, who will be willing to participate in the survey, until the desired sample size is reached. This technique is called a snowball sampling method or chain referral sampling technique (Daniel, 2011:111).

The benefit of this technique is that participants are reached that would not have otherwise been reached in the absence of this technique. However, a limitation posed by this technique is that the participants tend to reach out to others that have similar demographics and influences, which narrows down the variability of the sample (Daniel, 2011:191).

3.5. RESEARCH ETHICS

Research ethics are essentially established to ensure the researcher act responsibly and morally with the information gathered, from the subjects that are affected by the research (Saunders 2009:183-184). Some of the key ethical issues that were considered in this research study, were the privacy of the prospective and actual participants, as well as maintaining the confidentiality of the data. To remain objective when categorising the data into the five dimensions of tax fairness, in order to avoid distortion of the conclusions and recommendations made in this study. Lastly to maintain awareness of the way in which the data is analysed, used and reported and how it could affect the participants, specifically to avoid harm or embarrassment (Saunders, 2009:185-186).

Furthermore, permission was obtained from Steyn (2015) to utilise his database for the purpose of this study.

3.6. CONCLUSION

In summary, the purpose of this chapter is twofold: one is how the research objectives were met, and the second is to explain the rationale for using the chosen research methodology in order to meet the research objectives.

The next chapter presents and discusses the results of the data with the use of statistical techniques and to examine the general trends and visual displays between the different demographics and dimensions.

CHAPTER 4: DATA ANALYSIS

4.1. INTRODUCTION

The main purpose of this study is to explore taxpayers' perception of fairness of South Africa's tax structure, by exploring the occurrence of the five dimensions in the survey results. Chapter 3 presented the research design and methodology adopted in this study. In this chapter the results of the data analysis are presented and discussed.

This chapter first describes the data-analysis techniques that are used together with how the survey results were coded in order to enter the data into SPSS, after which it analyses the data with descriptive statistics and bivariate analysis to examine the general trends and visual displays between the different demographics and dimensions. It then concludes on the results and suggests future research.

4.2. ORIENTATION OF THE DATA-ANALYSIS TECHNIQUE

The survey results are compiled into a thematic framework, where after data coding is applied. After the data coding is complete, the information is run through the SPSS program. The outcome of the SPSS results is used to perform univariate analysis and descriptive statistics. Only one demographic variable will be analysed against each dimension, wherein the variables are respectively: language; age groups and gender.

The data results are presented in a excel spreadsheet, which contains each participant's answer to the open ended question, together with their language, age and gender. The thematic framework is constructed by assigning one of the five dimensions to each participant's answer. In the instance where a participant's answer can be classified into more than one dimension, the response was duplicated for each additional dimension identified, in order to count each dimension as a separate observation. The data is coded based on the completed thematic framework, which converts the qualitative data into quantitative data, to facilitate the univariate analysis and descriptive statistics.

A popular method to obtain explanations of patterns in data, is to demonstrate the results in a graph format, which easily provides an overview of the data, identifies outliers, patterns and unexpected phenomena (Everitt, 2011:25-26). Further in this chapter, the results from the survey are demonstrated in graphs and tables to explore the results of the perception of tax fairness presented in the sample.

Two models, Pearson's R and Spearman Correlation, are used to uncover the existence of a linear association between each dimension and demographic. Pearson's R and Spearman Correlation are two popular correlation coefficients used in behavioural, business and management research topics (Saunders, 2009:461). Pearson's R focusses on the linear association between two variables in the form of quantitative data, and measures the strength of such linear relationship. Spearman's Correlation was developed much later than Pearson's R, to address the strength of the relationship between two variables that were in the form of qualitative data, without having to assume that there is a linear relationship in the data set. Pearson's R is known to be 'product-moment' correlation coefficient, whereas Spearman's Correlation is known to be a 'rank' correlation coefficient, or better known as factor analysis (Hauke & Kossowski, 2011:88-89).

4.3. DATA CODING

The results from the survey were presented in textual format. It is required to convert the qualitative data into quantitative data, in order to perform a statistical analysis. A coding technique is used to ascribe a numeric value to each attribute in the data set. In order to measure the language of the participants, English is assigned as value 1, and Afrikaans is assigned as value 2.

When determining the age groups of the participants, the SARS age classification groups were used for ease of comparability with the revenue authority and in cases where further research is performed on this study. The age groups are as follow: below the age of 18; between ages 18 and 24; between ages 25 and 34; between ages 35 and 44; between ages 45 and 54; ages 55 to 64; ages 65 to 74; and lastly age 75 and older. Values 1 to 8 were ascribed to each category respectively.

Each of the five dimensions were labelled as follow: exchange with government; tax rate structure; self-interest; special provisions item; and general provisions item. The value 1 was ascribed to a 'Yes' in the instance where the observation met the classification of the dimension in question. The value 2 was ascribed to a 'No' where the observation did not meet the corresponding dimension.

Values 1 to 5 were ascribed to each category of dimensions as follow: exchange with government is 1; tax rate structure is 2; self-interest is 3; special provisions item is 4; and general provisions item is 5.

Included in Appendix A of this document is a codebook which displays the codification in a table format.

Lastly, a numeric value of 999 was ascribed to the label 'Missing data', for responses which do not make sense or were answered without context, and therefore could not logically be classified in either of the dimensions. Only 13 out of the total sample of 416 were coded as 999, which equates to a mere 3.12% of the sample, which is negligible for purposes of this study. Therefore 96.88% of the survey results are valid to analyse.

4.4. DESCRIPTIVE STATISTICS

Descriptive analysis is a statistical technique used to describe and summarise the characteristics of the collected data (Hristea, 2011:1453). Descriptive statistics are used in studies where it will not make sense to extrapolate the conclusion across the defined population and generalise the outcome (Hebl, n.d.).

The participant's demographics are explored in form of tables and bar graphs. The demographics collected in the data are language, age and gender. The dimensions results are demonstrated by display of a histogram and bar graph, together with a discussion of the mean and standard deviation for the dimensions identified from the survey results.

4.4.1. Demographics

In the survey, participants were prompted to indicate their language preference, their age and gender. The demographics of the survey results are explored in the paragraphs to follow, as it can have an influence on a taxpayer's perception of tax fairness. Limitations can exist in cases where the demographics of a survey are skewed to one side, however it is pointed out that it does not compromise the outcome of the study.

4.4.1.1. Language

The participants had to indicate their language preference during the completion of the survey. Two choices were provided, English and Afrikaans. From the 403 observations, 63 participants are English and 340 are Afrikaans. This results in 15.6% of the participants to be English and 84.4% of the participants to be Afrikaans. From the observation spread, it is evident that the majority of the participants are Afrikaans speaking.

Table 3 below demonstrates the frequency and percentage of the language choice of the participants.

Table 3: Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	63	15.6	15.6	15.6
	Afrikaans	340	84.4	84.4	100.0
	Total	403	100.0	100.0	

The above bar graph provides a snapshot of the apparent askew results of the language choice of the participants, which leans towards Afrikaans. This skewed results could have an impact on the overall results of the tax fairness perception of taxpayers in South Africa. However, in this study it is not perceived as an obstacle, as the objective of this study is to explore the results, and not to generalise the outcome.

This limitation can after all open up an opportunity for future studies to explicitly include more participants who prefer English, and also even to include other languages, such as Zulu.

Figure 1 below provides a graphical overview the frequency of the language choice of the participants.

Language

400300100100English Afrikans
Language

Figure 1: Language distribution

4.4.1.2. Age groups

As part of the questionnaire, participants had to indicate what their age is.

Both age groups 18 to 24 years and 65 to 74 years, represented the least of the total sample. Only 0.7% of the sample, with a representation of 3 out of the total 403 observations, is noted for both age groups 18 to 24 years and 65 to 74 years respectively.

The age group with the highest representation is ages 45 to 54. This age group represents 42.4% of the sample, with a 171 out of total 403 observations.

Next in order, is the age group 35 to 44, with a 123 observations and a depiction of 30.5% of the sample.

The two age groups that fall in between, are ages 55 to 64 and 25 to 34. 16.1% of the participants fall between ages 55 to 64 and 9.4% of the participants fall between ages 25 to 34. None of the participants were in the age group below 18 years and neither in the age group of 75 years and above.

Table 4 below demonstrates the frequency and percentage of the age groups of the participants.

Table 4: Age groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 24	3	0.7	0.7	0.7
	25 to 34	38	9.4	9.4	10.2
	35 to 44	123	30.5	30.5	40.7
	45 to 54	171	42.4	42.4	83.1
	55 to 64	65	16.1	16.1	99.3
	65 to 74	3	0.7	0.7	100.0
	Total	403	100.0	100.0	

It is observed from the bar graph above, that the results are leaning towards the ages between 45 and 54, which is a skewed representation if compared to the age representation as per the published 2011 tax statistics.

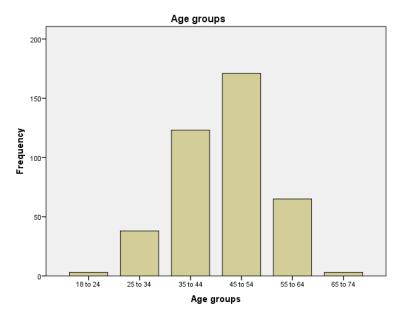
The tax statistics published by National Treasury and SARS (2013:37) demonstrate the various percentages of assessed individual taxpayers, by age group for the 2011 fiscal year. Age group 35 to 44 is the most represented taxpayers, whereas this age group is second highest in the sample. Ages between 25 and 34 is the second highest age group, where as it is the fourth highest in the sample. Ages 45 to 54 is at the third most represented age group, compared to being the most represented age group in the sample.

The skewed representation can be seen as a limitation, however, it is not a restriction for purposes of this study, as the results are not extrapolated to a defined population for purposes of generalising any conclusions reached.

Future study should consider aligning the representation of age groups per the survey results to that of the representation of age groups contributing to the total tax revenues for that specific year.

Figure 2 below provides a graphical overview the frequency and percentage of the age groups of the participants.

Figure 2: Language distribution



4.4.1.3. Gender

Majority of the participants are male, representing 67.2% of the sample, with a count of 271 out of the total 403 valid observations. Woman represent only a third of the sample, at 32.8%.

Table 5 below demonstrates the sample distribution between male and female participants.

Table 5: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	271	67.2	67.2	67.2
	Female	132	32.8	32.8	100.0
	Total	403	100.0	100.0	

The gender representation in this sample is, however, aligned with the gender representation per the personal income tax assessed observed by SARS (National Treasury & SARS, 2013:37).

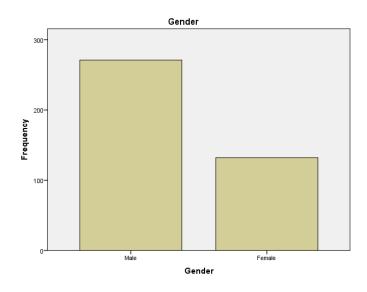
The sample demographics is summarised in short to represent Afrikaans men between the ages of 45 to 54. At which points, 84.4% of the participants are Afrikaans speaking, 67.2% are male and 42.4% are between the ages 45 to 54.

Another limitation of this study is that the only demographics that were considered are language, age and gender. Howbeit, other demographic measures can also be studied to explore the phenomena of what could contribute towards forming a perception of tax fairness. The other demographics that can be explored are education, level of income, experience of interaction with SARS, religion and ethnicity. Future studies can include fields in the survey to facilitate these demographics, in order to perform further explorations.

Other variables that can have an impact on the participant perception of tax fairness are their income level and number of dependents (Hennighausen & Heinemann, 2010:269 - 277).

Figure 3 below demonstrates the sample distribution to be two thirds male and one third female participants.

Figure 3:Gender distribution



4.4.2. Dimensions

The survey results from the open-ended question to participants were analysed and categorised into each of the five dimensions of tax fairness, in order to explore the mean, standard deviation and frequency thereof.

The table below provides an overview of the frequencies and percentages of the dimensions identified in the survey results.

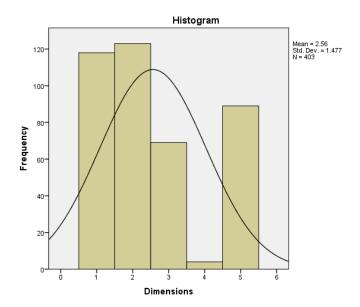
Table 6: Dimensions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Equity exchange	118	29.3	29.3	29.3
	Tax rate structure	123	30.5	30.5	59.8
	Self interest	69	17.1	17.1	76.9
	Special provision item	4	1.0	1.0	77.9
	General provision item	89	22.1	22.1	100.0
	Total	403	100.0	100.0	

Tax rate structure is identified as the most frequently used dimension amongst participants, representing 30.5% of the total observations. 118 of the total observations are identified as equity exchange dimension, which is next in line, and fairly close to the tax rate structure dimension, with only a 1.2% difference. General provision item consists of 22.1% of the total, with 89 observations. Self-interest represented 17.1% of the total observations. The least occurring dimension is special provision item at only 1% of the total, with a mere 4 observations.

The figure below provides an illustration of the distribution of the dimensions.

Figure 4:Dimensions distribution



The mean for the dimensions scored 2.56, with a standard deviation of 1.477 for the 403 observations. The histogram illustrates that the data is close to that of a normal distribution. It can be more or less interpreted that the participants used the self-interest dimension, if 2.56 is rounded off to 3, to form their perception of the fairness of South Africa's tax system. However, the standard deviation of 1.477 is fairly large, which indicates that the dimensions are scattered in wide intervals from the mean.

By analysing the standard deviation it can be concluded that the participants' average dimension used to form their perception of tax fairness in South Africa, it cannot be generalised that the self-interest dimension is the overall used by the participants.

The results suggest that special provision item is not as an important dimension in South Africa or the participants do not have the knowledge of the existing provisions in South Africa. Purely from this study, it cannot be concluded the reasons for the low representation. Further studies can be done to include the education level of participants in order to be able to draw substantiated conclusions.

4.5. PRESENTATION AND DISCUSSION OF RESULTS

An overview of the results have been presented in the previous section. The purpose of this section is to delve into more detail, by analysing each dimension against each demographic, and measuring the linear relationship between each of the two.

4.5.1. Dimensions and language

The representation between Afrikaans and English within a dimension can be misleading, if analysed in isolation, due to the skewed representation of Afrikaans representing 84.4% of the total sample. As a demonstration, self interest is ranked as third most used dimension in both languages, but only 13% of the participants that used self interest as a dimension are English and 87% are Afrikaans. For this reason, representation of the two languages are analysed within a dimension, together with the results of a dimensions represented within a language.

As demonstrated in the bar graph below, tax rate structure is the highest occurring dimension for Afrikaans language, with a count of 103 observation. The least observations is special provision item in English language, with only 1 participant using this dimension to express their perception of fairness of South Africa's tax system.

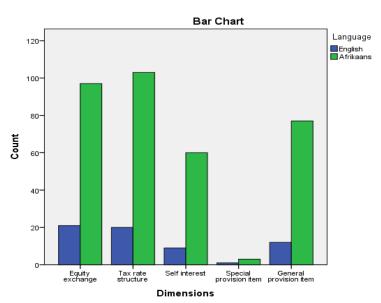


Figure 5:Dimensions per language

Despite Afrikaans representing 84.4% of the total sample, it is noticeable that 28.5% of Afrikaans speaking participants used equity exchange as a dimension to form their perception of tax fairness in South Africa, which is lower than the English speaking participants using this dimension (33.3%). A less noticeable difference between the two languages, 30.3% of Afrikaans speaking participants used tax rate structure, which is slightly lower than the 31.7% of the English speaking participants using this dimension.

The two dimensions that are used the most between the two languages, are tax rate structure, at 30.5%, and equity exchange at 29.3% of the five dimensions. From these statistics, it is possible that, due to the skewed representation of Afrikaans speaking participants in the sample, equity exchange might have been higher, had there been more English participants that were partaking in the survey. However, the difference between equity exchange and tax rate structure amongst English speaking participants are represented by 1 participant, as 20 participants used tax rate structure and 21 used equity exchange.

The other three dimensions have the same ranking between Afrikaans and English speaking participants, with general provision item ranked third, self interest fourth and special provision item fifth. Within the English language, general provision item featured at 19%, self interest at 14.3% and lastly, special provision item at 1.6%. Similar in ranking, general provision item presents 22.6% within Language, self interest at 17.6% and lastly, special provision item at 0.9%, amongst Afrikaans speaking participants.

The table below demonstrates the breakdown between Afrikaans and English, per dimension identified.

Table 7: Dimensions and language

			Lan	Language	
			English	Afrikaans	Total
Dimensions	Equity exchange	Count	21	97	118
		% within Dimensions	17.8%	82.2%	100.0%
		% within Language	33.3%	28.5%	29.3%
		% of Total	5.2%	24.1%	29.3%
	Tax rate structure	Count	20	103	123
		% within Dimensions	16.3%	83.7%	100.0%
		% within Language	31.7%	30.3%	30.5%
		% of Total	5.0%	25.6%	30.5%
	Self interest	Count	9	60	69
		% within Dimensions	13.0%	87.0%	100.0%
		% within Language	14.3%	17.6%	17.1%
		% of Total	2.2%	14.9%	17.1%
	Special provision item	Count	1	3	4
		% within Dimensions	25.0%	75.0%	100.0%
		% within Language	1.6%	0.9%	1.0%
		% of Total	0.2%	0.7%	1.0%
	General provision item	Count	12	77	89
		% within Dimensions	13.5%	86.5%	100.0%
		% within Language	19.0%	22.6%	22.1%
		% of Total	3.0%	19.1%	22.1%
Γotal		Count	63	340	403
		% within Dimensions	15.6%	84.4%	100.0%
		% within Language	100.0%	100.0%	100.0%
		% of Total	15.6%	84.4%	100.0%

The table below demonstrates the association between languages and dimensions identified.

Table 8: Symmetric Measures

Table 6. Cylinicatio incasares						
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance	
Interval by Interval	Pearson's R	.043	.049	.387°	.387°	
Ordinal by Ordinal	Spearman Correlation	.047	.050	.347°	.347°	
N of Valid Cases		403				

a. Not assuming the null hypothesis.

The Pearson's R value is calculated at 0.043 which is closer to 0 than to 1, which means that the results are scattered far from each other and there is no linear relationship between language and dimension. The Spearman Correlation confirms Pearson's R of 0.047, and is also closer to 0, demonstrating that there is no linear relationship between language and dimensions.

Assuming that the sample size of 403 is adequate as well as assuming that the underlying population is an approximate normal distribution, the approximate significance is 0.387 for both Spearman Correlation and Pearson's R. Even though the association between language and dimension is statistically significant, there is proven to be no linear correlation between language and dimensions.

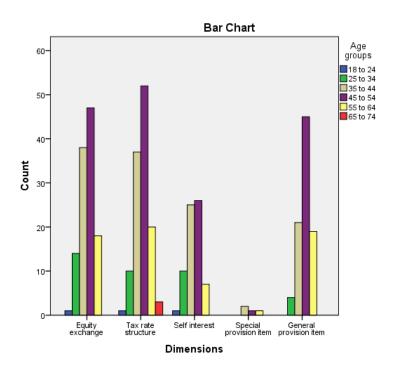
b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

4.5.2. Dimensions and age groups

The bar graph below demonstrates the dimensions per age group. It can clearly be seen that the age group 45 to 54 has the most observations in tax rate structure.

Figure 6:Dimensions per age group



Both age groups 18 to 24 and 65 to 74 are the least represented age groups of the participants with both at 0.7% of the total, and each contains only 3 participants. However, for the age group 18 to 24, each of the three observations used a different dimension: self interest, equity exchange and tax rate structure, therefore an even 33.30% for each dimension within this age group. Whereas all three participants in the age group 65 to 74 used tax rate structure as a dimension, therefore 100% of the 65 to 74 age group.

The highest represented age group is ages 45 to 54, at 42.4% of the total observations (171 out of 403). Within this age group, tax rate structure is the highest at 30.4%, secondly equity exchange at 27.5%, thirdly general provision item at 26.30%, followed by self interest at 15.2%. A different ranking pattern is observed for the second most represented age group (30.5%), which is ages 35 to 44. The most observed dimension within age group 35 to 44

is equity exchange with 38 observations out of 123 (30.9%), and next in line is tax rate structure with only one less observations (37) than equity exchange, at 30.10%. The third highest dimension within age group 35 to 44, is self interest at 20.3%, followed by general provision item at 17.1%.

Age group 55 to 64 represents 16.1% of the total. At first glance it appears that special provision item is the highest percentage within the dimensions for age group 55 to 64, but that is due to the low count of total observations in special provision item dimension. The dimension appearing the most in this age group is tax rate structure at 30.8%, followed by general provision item at 29.2% and thirdly, equity exchange at 27.7%.

The age group 25 to 34 makes up for 9.4% of the total observations. Similarly to age group 35 to 44, equity exchange is the most observations within the age group, at 36.8%, which is also the highest represented dimension across all age groups. Tax rate structure and self interest are both 26.3% of the total observations within age group 25 to 34. The least occurring dimension with this age group is general provision item (10.5%).

The overall least observed dimension is special provision item and is also the least observed dimension within age groups 35 to 44, which contained 50% of the observations within this dimension, and age groups 45 to 54 and 55 to 64 respectively make up for 25% of the total observations within this dimension. There were no observations for special provision item dimension in age groups 18 to 24, 25 to 34 and 65 to 74.

Apart from special provision item, it is noticeable that there are no pattern in the order of dimensions of choice, per age group.

The table below demonstrates the dimensions per age group.

Table 9: Dimensions and age groups

					Age g	roups			Total
			18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	
Dimensions	Equity	Count	1	14	38	47	18	0	118
	exchange	% within Dimensions	0.8%	11.9%	32.2%	39.8%	15.3%	0.0%	100.0%
		% within Age groups	33.3%	36.8%	30.9%	27.5%	27.7%	0.0%	29.3%
		% of Total	0.2%	3.5%	9.4%	11.7%	4.5%	0.0%	29.3%
	Tax rate	Count	1	10	37	52	20	3	123
	structure	% within Dimensions	0.8%	8.1%	30.1%	42.3%	16.3%	2.4%	100.0%
		% within Age groups	33.3%	26.3%	30.1%	30.4%	30.8%	100.0%	30.5%
		% of Total	0.2%	2.5%	9.2%	12.9%	5.0%	0.7%	30.5%
	Self interest	Count	1	10	25	26	7	0	69
		% within Dimensions	1.4%	14.5%	36.2%	37.7%	10.1%	0.0%	100.0%
		% within Age groups	33.3%	26.3%	20.3%	15.2%	10.8%	0.0%	17.1%
		% of Total	0.2%	2.5%	6.2%	6.5%	1.7%	0.0%	17.1%
	Special	Count	0	0	2	1	1	0	4
	provision	% within Dimensions	0.0%	0.0%	50.0%	25.0%	25.0%	0.0%	100.0%
	item	% within Age groups	0.0%	0.0%	1.6%	0.6%	1.5%	0.0%	1.0%
		% of Total	0.0%	0.0%	0.5%	0.2%	0.2%	0.0%	1.0%
	General	Count	0	4	21	45	19	0	89
	provision	% within Dimensions	0.0%	4.5%	23.6%	50.6%	21.3%	0.0%	100.0%
	item	% within Age groups	0.0%	10.5%	17.1%	26.3%	29.2%	0.0%	22.1%
		% of Total	0.0%	1.0%	5.2%	11.2%	4.7%	0.0%	22.1%
Total		Count	3	38	123	171	65	3	403
		% within Dimensions	0.7%	9.4%	30.5%	42.4%	16.1%	0.7%	100.0%
		% within Age groups	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	0.7%	9.4%	30.5%	42.4%	16.1%	0.7%	100.0%

The table below demonstrates the association between age groups and dimensions identified.

Table 10: Symmetric Measures

Table 10: Oyilliloti lo modedi oo						
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance	
Interval by Interval	Pearson's R	.102	.046	2.044	.042°	
Ordinal by Ordinal	Spearman Correlation	.081	.049	1.632	.103°	
N of Valid Cases		403				

a. Not assuming the null hypothesis.

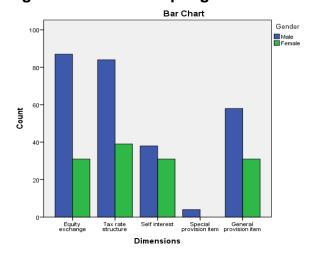
By analysing the Pearson's R value of 0.102, which is closer to 0 than to 1, it means that the results are scattered far from each other and there is no linear relationship between age groups and dimension. The Spearman Correlation is calculated at 0.081 and confirms Pearson's R that there is no linear relationship between age groups and dimensions.

The approximate significance is 0.042 for Pearson's R and 0.103 for Spearman Correlation, which depicts that there is no statistically significant relationship between age groups and dimension.

4.5.3. Dimensions and gender

The figure below provides an illustration of the distribution of the dimensions between male and female. It is evident from this bar graph that male participants had the most observations overall and in equity exchange. It is also illustrated that there were no observations for females under special provision item.

Figure 7:Dimensions per gender



b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

In the female category, tax rate structure is the highest observed dimension at 29.5%. This is particularly interesting, as the findings in a German setting also showed that females are more inclined to use tax rate structure as a preferred dimension of tax fairness (Hennighausen & Heinemann, 2010:265). The three remaining dimensions within the female category, which are equity exchange, general provision item and self interest are evenly spread at 23.5% each.

The male category does not have a similar pattern amongst the dimensions as the female category. Equity exchange represents the most occurring dimension at 32.1% of the total male respondents (271). Secondly, tax rate structure (31%), thirdly general provision item (21.4%), fourthly self interest and lastly special provision item (1.5%).

The dimensions are split between male and female as follow: tax rate structure with 68.3% male and 31.7% female; equity exchange with 73.7% male and 26.3% female; general provision item with 65.2% male and 34.8% female; self interest with 55.1% male and 44.9% female; and special provision item with 100% male and 0% female.

The table below demonstrates the dimensions per gender.

Table 11: Dimensions and gender

			Ger	nder	
			Male	Female	Total
Dimensions	Equity exchange	Count	87	31	118
		% within Dimensions	73.7%	26.3%	100.0%
		% within Gender	32.1%	23.5%	29.3%
		% of Total	21.6%	7.7%	29.3%
	Tax rate structure	Count	84	39	123
		% within Dimensions	68.3%	31.7%	100.0%
		% within Gender	31.0%	29.5%	30.5%
		% of Total	20.8%	9.7%	30.5%
	Self interest	Count	38	31	69
		% within Dimensions	55.1%	44.9%	100.0%
		% within Gender	14.0%	23.5%	17.1%
		% of Total	9.4%	7.7%	17.1%
	Special provision item	Count	4	0	4
		% within Dimensions	100.0%	0.0%	100.0%
		% within Gender	1.5%	0.0%	1.0%
		% of Total	1.0%	0.0%	1.0%
	General provision item	Count	58	31	89
		% within Dimensions	65.2%	34.8%	100.0%
		% within Gender	21.4%	23.5%	22.1%
		% of Total	14.4%	7.7%	22.1%
otal		Count	271	132	403
		% within Dimensions	67.2%	32.8%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	67.2%	32.8%	100.0%

The table below demonstrates the association between gender and dimensions identified.

Table 12: Symmetric Measures

	mount mount				
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	.068	.049	1.365	.173°
Ordinal by Ordinal	Spearman Correlation	.089	.049	1.786	.075°
N of Valid Cases		403			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Pearson's R value of 0.068 is closer to 0 than to 1, which means that the results are scattered far from each other and there is no linear relationship between gender and dimension. The Spearman Correlation confirms Pearson's R results (0.089) that there is no linear association between gender and dimensions.

The approximate significance is 0.173 for Pearson's R and 0.075 for Spearman Correlation, which depicts that there is no statistically significant relationship between gender and dimension.

4.6. CONCLUSION

The descriptive statistics indicated the demographic sample of 403 valid observations to include 84.4% Afrikaans, 15.6% English, 67.2% male, 32.8% female. Of the total participants, 42.4% were in the age range 45 to 54, 30.5% of the participants were in the age range 35 to 44, 16.1% of the participants were in the age range 55 to 64, 9.4% of the participants were in the age range 65 to 74 and 18 to 24, respectively.

The descriptive statistics indicated the following important findings:

- Despite English language only representing 15.6% of the participants, English participants represent the highest for tax rate structure (31.7%) and equity exchange (33.30%) within languages, which are also the two dimensions that occurred the most across dimensions. In comparison to tax rate structure that is represented by Afrikaans participants equates to 30.30%, and equity exchange at 28.5%.
- Equity exchange and tax rate structure were interchangeably the most occurring dimensions across most age groups. Age group 18 to 24 had 33.3% respectively, age group 25 to 34 had 36.8% and 26.3% respectively, age group 35 to 44 had 30.9% and 30.1% respectively, age group 45 to 54 had 27.5% and 30.4% respectively. With the exception of ages 55 to 64, where the general provision item (29.2%) was preferred over equity exchange (27.7%) and ages 65 to 74, where all participants in this age group used tax rate structure.

• Females used tax rate structure dimension the most (29.5%), and used equity exchange, general provision item and self interest dimensions evenly at 23.5% each. None of the females used special provision item.

Two models were used to determine whether a positive relationship existed between language and the occurrence of either of the five dimensions of tax fairness. Results from the Pearson's R (0.043) and Spearman Correlation coefficient (0.047) confirmed that there is no linear relationship between language and dimension, despite the association between language and dimension being statistically significant (approximate significance is 0.387 for both Spearman Correlation and Pearson's R). Results from the Pearson's R value of 0.102 and Spearman Correlation of 0.081 demonstrates that there is no linear relationship between age groups and dimensions. Results from the Spearman Correlation (0.089) confirmed Pearson's R (0.068) that there is no linear association between gender and dimensions. Reasons for this could be that there are other demographics that need to be considered and can distort the associations with each of the dimensions.

Chapter 5 summarises the findings, discusses the contributions of this study to literature, exposes the limitations found in this study and suggests the opportunities of future research.

CHAPTER 5: CONCLUSION

5.1. INTRODUCTION

The primary objective of the present study is to explore the relationship between specific demographic variables, namely age group, language and gender, and the dimensions of the fairness of the tax burden as it is perceived by individual taxpayers in South Africa. This primary research objective is supported by secondary objectives, namely to formulate a theoretical underpinning for the study, to clarify the research design and methodology adopted in the study, to analyse the data, and to present and discuss the results from the data analysis.

The main purpose of this final chapter is to conclude on the primary and secondary objectives of this study, by providing a summarised overview of the research objectives in terms of the findings from this study, as well as the limitations and opportunities of future research.

5.2. SUMMARY OF FINDINGS AND CONCLUSION

The theoretical basis of this study is provided in Chapter 2 of this study. In that chapter the tax fairness construct is explained. From that, the theoretical basis is formulated in terms of the main dimensions of tax fairness that are recognised in the literature. The dimensions adopted in this study as the theoretical underpinning are: general fairness, self-interest, special provision for wealthy, tax rate and exchange with government (see Section 2.4 of this document for detail). Furthermore, literature recognises that there are demographic variables that may have an influence on the dimensions of tax fairness. The variables in this study are limited to age groups, language and gender, due to the exploratory nature and the limited scope of the study.

The research design and methodology adopted in the present study are clarified in Chapter 3. This chapter provides an orientation of the research design and then clarifies the research methodology and the source of data. The research was exploratory in nature and the purpose was not to generalise the findings. Therefore the research methodology adopted in this study is deemed to be adequate and to be relevant in the pursuit of the primary research objective. The research methodology was effective in providing a reliable underpinning for the results that emerged from the data analysed and presented in Chapter 4.

Chapter 4 provides an orientation of the data analysis technique that was used to thematically analyse the qualitative data, as well as the procedure that was followed to convert the thematic results into quantitative data that could be analysed statistically (see Sections 4.2 and 4.3 of this document for more detail). The results of the data analyses are presented in the form a synthesis of tables and graphs, together with a descriptive statistics of the empirical findings. The most profound dimension identified is the tax rate structure (see Section 4.4.4 of this document for more detail). This dimension is followed by equity exchange, general provision and self-interest. Special provision item is the least occurring dimension (see Section 4.6 of this document for more detail).

Given the primary research objective of the study, the results originating from the Pearson's R and Spearman correlation tests (see Sections 4.5.1, 4.5.2 and 4.5.3 of this document) indicate that in essence there are not a statistically significant relationship between the five dimensions (general fairness, self-interest, special provision for wealthy, tax rate and exchange with government) and three demographic variables, namely age groups, language and gender. The inferences that can be made from these results are that the selected demographic variables have very little influence on the dimensions of the tax burden fairness perceptions of individual taxpayers in South Africa.

5.3. LIMITATIONS

An important limitation of the study is the possible bias in the analysis and classification of the qualitative data. Due to the subjectivity and overlapping nature of the five dimensions of tax fairness, it is a real possibility that another researcher could classify the results in different dimensions. Another possible limitation posed relates to the data that was used in the study. This data was originally collected by means of a survey that used a referral technique, that adopted the principles of snowball sampling, to distribute the survey. Prospective respondents tend to forward the survey to others that may have similar perceptions and/or demographics profiles. For instance, the results indicate that the majority of the participants are Afrikaans speaking (84.4%), which may be indicative of this phenomenon. However, this limitation will not necessary compromise the outcome of this study due to the explorative nature of the study and the fact that the main purpose of the research was not to extrapolated the results to a defined population for purposes of generalising any conclusions reached.

5.4. FUTURE RESEARCH

This study can provide a starting point for future studies that aim to pursue the perceptions of tax fairness in South Africa, This study may also assist SARS to come to a better understanding of the elements that may play a role in the deteriorating voluntary compliance status of individual taxpayers in South Africa.

Future studies may consider the inclusion of other demographic variables to explore the phenomena of what could contribute towards forming a perception of tax fairness. The other demographics that can be explored are education, level of income, experience of interaction with SARS, religion and ethnicity. Participants with other languages should also to be included in the sample, such as Zulu. A multivariate analysis can be performed to find more detailed or isolated associations within demographics.

5.5. CONCLUDING REMARKS

From the findings it is evident that exchange with government and tax rate structure dimensions are the most important dimensions to the respondents. In a government where there is a perception that taxpayers' money is being mal-managed or misappropriated, it is trite to ensure tax policy makers consider fairness as an important maxim in a tax system, in order to obtain optimum tax compliance, little tax evasion and aggressive tax avoidance.

LIST OF REFERENCES

- Abdul-Razak, A. & Adafula, C.J. 2013. Evaluating taxpayers' attitude and its influence on tax compliance decisions in Tamale, Ghana. *Journal of Accounting and Taxation*, 5(3): 48–57.
- Adams, J. Khan, H.T.A. Raeside, R. & White, D. 2007. Research Methods for Graduate Business and Social Science Students. New Delhi: SAGE Publications India Pvt Ltd. [Online] Available from: http://dx.doi.org/10.4135/9788132108498.n5 [Accessed: 2017-05-25].
- Azmi, A.A.C. & Perumal, K.A. 2008. Tax Fairness Dimensions In An Asian Context: The Malaysian Perspective. *International Review of Business Research Papers*, 4(5): 11-19.
- Belay, S.A. & Viswanadham, P. 2014. Tax Fairness Perceptions and Compliance
 Behavior: Evidence from the Metropolitan Cities of the Amhara Regional State of
 Ethiopia. *International Journal of Science and Research*, 5(4):1173–1183.
- Benk, S., Budak, T. & Cakmak, A.F. 2012. Tax Professionals' Perceptions of Tax Fairness: Survey evidence in Turkey. *International Journal of Business and Social Science*, 3(2): 112-117.
- Bible. 1995. The Holy Bible: New International Version. Cape Town: Bible Society of South Africa.
- Çevik, S. 2014. Tax Morale in Socio-Political Interactions: Insiders and Outsiders. *The Journal of Applied Business and Economics*, 16(3): 101-115.
- Christensen, A. L., Weihrich, S. G., & Gerbing, M. D. (1994). The impact of education on perceptions of tax fairness. *Advances in Taxation*, 6:63-94.
- Christensen, A.L. & Weihrich, S.G. (1996). Tax fairness: Different roles, different perspectives. *Advances in Taxation*, 8:27-61.
- Cohen, J., Manzon, G.B., & Zamora, V.L. 2015. Contextual and Individual Dimensions of Taxpayer Decision Making. *Journal of Business Ethics*, 126(4): 631-647.
- Cornelissen, T., Himmler, O. & Koenig, T. 2013. Fairness spillovers The case of taxation. *Journal of Economic Behavior & Organization*, 90:164–180.
- Daniel, J. 2011. Sampling essentials: practical guidelines for making sampling choices. Los Angeles, CA: Sage.
- Davis Tax Committee, 2016. Macro Analysis of the Tax System and Inclusive Growth in South Africa. Davis Tax Committee final report.

- Du Preez, H. 2015. *A construction of the fundamental principles of taxation*. Unpublished doctoral thesis. Pretoria: University of Pretoria. [Online] Available from: http://hdl.handle.net/2263/57171 [Accessed: 2017-06-11].
- Engida, T.G. & Baisa, G.A. 2014. Factors Influencing taxpayers' compliance with the tax system: An empirical study in Mekelle City, Ethiopia. *eJournal of Tax Research*, 12(2): 433-452.
- Everitt, B. & Hothorn, T. 2011. An Introduction to Applied Multivariate Analysis with R. In: Gentleman, R., Hornik, K. & Parmigiani, G. (eds.) *Use R!*. New York, USA: Springer Science+Business Media LLC. [Online] Available from: http://ebookcentral.proquest.com.uplib.idm.oclc.org/lib/pretoria-ebooks/reader.action?docID=3066676# [Accessed: 2017-05-10].
- Farquhar, J.D. 2012. *Case study research for business*. London: SAGE Publications Ltd. [Online] Available from: doi: 10.4135/9781446287910 [Accessed: 2017-05-25].
- Farrar, J. 2015. An empirical analysis of taxpayers' fairness preferences from Canada's Taxpayer Bill of rights. *Journal of Accounting and Taxation*, 7(5): 71-79.
- Fin24. 2017a. Taxpayers hit with the highest marginal rate since '94. *Fin24*, 22 February. [Online] Available from: http://www.fin24.com/Budget/taxpayers-hit-with-highest-marginal-rate-since-94-20170222 [Accessed: 2017-06-117].
- Fin24. 2017b. Tax resistance a legitimate show of unhappiness expert. *Fin24*, 19 May. [Online] Available from: http://www.fin24.com/Economy/tax-resistence-a-legitimate-show-of-unhappiness-expert-20170519 [Accessed: 2017-05-27].
- Foddy, W. 1994. Constructing questions for interviews and questionnaires: theory and practice in social research. Cambridge: Cambridge University Press.
- Gerbing, M.D. 1988. *An empirical study of taxpayer perceptions of fairness*. Unpublished doctoral thesis, University of Texas.
- Gilligan, G. & Richardson, G. 2005. Perceptions of tax fairness and tax compliance in Australia and Hong Kong: A preliminary study. *Journal of Financial Crime*, 14(4):331-343.
- Hauke, J. & Kossowski, T. 2011. Comparison of Values of Pearson's and Spearman's Correlation Coefficients on the Same Sets of Data. [Online] Available from: https://www.degruyter.com/downloadpdf/j/quageo.2011.30.issue-2/v10117-011-0021-1/v10117-011-0021-1.pdf [Accessed: 2017-05-08].

- Hebl, M. Not dated. *Descriptive Statistics*. [Online] Available from: http://onlinestatbook.com/2/introduction/descriptive.html [Accessed: 2017-05-15].
- Hennighausen, T. & Heinemann, F. 2010. Don't Tax Me? Determinants of Individual Attitudes Toward Progressive Taxation. *German Economic Review*, 16(3): 255-289.
- Hicklin v SIR, 1980 (1) SA 481 (A) (41 SATC 179).
- Hristea, F.T. 2011. Statistics: An Overview. In: Lovric, M. (ed.) *Statistics: An Overview*. 1st ed. London, UK: Springer Berlin Heidelberg.
- Jackson, B. R., & Milliron, C. V. 1986. Tax compliance research: Findings, problems and prospects. *Journal of Accounting Literature*, 5:125-165.
- Johnston, S.S. 2015. Tax Havens Hide \$7.6 Trillion of Global Wealth, Economist Says.

 TaxAnalyst, 23 September. [Online] Available from:

 http://services.taxanalysts.com/taxbase/tnt3.nsf/CurEdHighlights/D445699C0A4AD

 6C585257EC90006C472?OpenDocument [Accessed: 2015-09-25].
- Kirchler, E., Niemirowski, A., & Wearing, A. 2006. Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers. *Journal of Economic Psychology*, 27(4):502-517.
- Kiyosaki, R.T. 2009. Rich Dad Poor Dad. New York, NY: Warner Books.
- Koumbiadis, N.D.J.O.O., Pandit, M.D.D. & Ritsatos, T., 2014. Tax evasion and compliance: from the neo classical paradigm to behavioural economics, a review. *Journal of Accounting & Organizational Change*, 10(2):244-262.
- Maroun, W., Turner, M. & Coldwell, D. 2014. Capital gains tax in South Africa:

 Perceptions of fairness? *South African Journal of Economic and Management Sciences*, 17(2):124–139.
- Miller, H., 2014. Current Issues in Corporate Tax. Fiscal Studies, 35(4):397-400.
- Momoniat, I. (presenter). 2017. 2017 Tax Policy Issues in SA. (2017-05-22). Not known. [Narrated PowerPoint presentation].
- Muli, K.M.M. & Steyn, T.L. 2015. Exploring individual taxpayers' perceptions of tax complexity: a pilot study. In: Evans, C., Krever, R. & Mellor, P. (eds.) *Tax Simplification*. The Netherlands: Kluwer Law International.
- National Treasury and South African Revenue Service. 2013. 2012, Tax Statistics. National Treasury and South African Revenue Service. 2016. 2016, Tax Statistics.

- Oberholzer. R. 2007. *Perceptions of taxation: a comparative study of different population groups in South Africa*. Unpublished doctoral thesis. Pretoria: University of Pretoria. [Online] Available from: http://upetd.up.ac.za/thesis/available/etd-05192008-170854/ [Accessed: 27-04-2017].
- Organisation for Economic Co-operation and Development. 2001. *The OECD's project on harmful tax practices: the 2001 progress report*. [Online] Available from: http://www.oecd.org/ctp/harmful/2664450.pdf [Accessed: 2015-09-25].
- Oxford English Dictionary. Not dated. *Fairness*. [Online] Available from: http://www.oed.com.uplib.idm.oclc.org/view/Entry/67729?redirectedFrom=fairness# eid [Accessed: 2017-06-04].
- Pienaar Brothers (Pty) Ltd v Commissioner for the South African Revenue Service and Another, 2017 SA 231 (HC).
- Piketty, T., Saez, E. & Stantcheva, S. 2014. Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities. *American Economic Journal.Economic Policy*, 6(1): 230-271.
- Richardson, G. 2006. The Impact of Tax Fairness Dimensions on Tax Compliance
 Behaviour in an Asian Jurisdiction: The Case of Hong Kong. *The International Tax Journal*, 32(1): 29-42.
- Robbins, T.L. & Jeffords, B.C. 2004. The consequences of fairness for a small professional services firm. *Journal of Small Business Strategy*, 15(1):81-92.
- Robson, C. 1993. Real world research: a resource for social scientists and practitioner-researchers. Oxford: Blackwell.
- Saad, N. 2010. Fairness Perceptions and Compliance Behaviour: The Case of Salaried Taxpayers in Malaysia after Implementation of the Self-Assessment System. *eJournal of Tax Research*, 8(1): 32-63.
- Saad, N. 2011. Fairness Perceptions and Compliance Behaviour: Taxpayers' Judgments in Self-Assessment Environments. Unpublished doctoral thesis. Christchurch:
 University of Canterbury. [Online] Available from:
 https://ir.canterbury.ac.nz/bitstream/handle/10092/5065/thesis_fulltext.pdf?sequence=1&isAllowed=y [Accessed: 2017-03-28].
- Saeed, A. & Shah, A. 2011. Enhancing tax morale with marketing tactics: A review of literature. *African Journal of Business Management*, 5(35):13559-13565.

- Saunders, M., Lewis, P. & Tornhill, A. 2009. *Research methods for business students*. 5th ed. London: Pearson.
- Secretary of State for Social Security and Another v Tunnicliffe, 1991 (2) ALL ER 712 (CA).
- Sekaran, U. & Bougie, R. 2013. Research methods for business: a skill-building approach. 6th ed. United Kingdom: John Wiley.
- Smith v Commissioner for Inland Revenue, 1964 (1) SA 324 (A).
- Smith, A. 1817. An Inquiry into the Nature and Causes of the Wealth of Nations. In: Manis, J. (ed.) *The Electronic Classics Series*. 2nd ed. Hazleton, USA: PSU-Hazleton.
- Sofian, S. 2014. The Antecedents of Taxpayers Compliance Behavior and the Effectiveness of Thai Local Government Levied Tax. *IBT Journal of Business Studies*, 9(1): 23-39.
- South Africa. 2014. Memorandum on the Objects of Tax Administration Laws Amendment Bill, 2015.
- South Africa. Income Tax Act, No. 58 of 1962. In: SA Institute of Tax Practitioners. 2017. SAIT compendium of tax legislation 2017. Cape Town: Juta.
- South African Revenue Service. 2016. Strategic Plan 2016/17 2020/21.
- Steyn, T.L. 2015. A conceptual framework for evaluating the tax burden of individual taxpayers. Australian Tax Teachers Association Doctoral Series. Vol. 5. Australia: Wolters Kluwer, CCH.
- US v Carlton, 1994 (26) US 512 (A).
- Valletta, G. 2014. Health, fairness and taxation. *Social Choice and Welfare*, 43(1): 101-140.
- Van der Walt, J. 2014. On South African tax compliance, tax morality and taxpayers' freedom to do tax planning. *South African Institute of Tax Professionals*. [Online] Available from: http://www.thesait.org.za/news/159616/-On-South-African-tax-compliance-tax-morality-and-taxpayers-freedom-to-do-tax-planning.htm [Accessed: 2017-06-04].
- Vermeulen, L. & Coetzee, M., 2006. Perceptions of the dimensions of the fairness of affirmative action: A pilot study. *South African Journal of Business Management*, 37(3):53-65.

Vythelingum, P., Soondram, H. & Jugurnath, B. 2017. An assessment of tax morale among Mauritian taxpayers. *Journal of Accounting and Taxation*, 9(1):1-10.

APPENDIX A:
DATA CODING

Codebook

Language

		Value
Standard Attributes	Label	Language
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	English
	2	Afrikaans

Age Groups

		Value
Standard Attributes	Label	Age groups
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Below 18
	2	18 to 24
	3	25 to 34
	4	35 to 44
	5	45 to 54
	6	55 to 64
	7	65 to 74
	8	75 and older

Gender

		Value
Standard Attributes	Label	Gender
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Male
	2	Female

Exchange with government

		Value
Standard Attributes	Label	Exchange with
		government
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No

Tax rate structure

		Value	
Standard Attributes	Label	Tax	rate
		structure	
	Туре	Numeric	
	Measurement	Nominal	
Valid Values	1	Yes	
	2	No	

Self interest

		Value
Standard Attributes	Label	Self interest
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No

Special provisions item

		Value
Standard Attributes	Label	Special
		provisions item
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No

General provisions item

		Value
Standard Attributes	Label	General
		provisions item
	Туре	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No





FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

Declaration Regarding Plagiarism

The Faculty of Economic and Management Sciences emphasises integrity and ethical behaviour with regard to the preparation of all written assignments.

Although the lecturer will provide you with information regarding reference techniques, as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before submitting an assignment.

You are guilty of plagiarism when you extract information from a book, article, web page or any other information source without acknowledging the source and pretend that it is your own work. This does not only apply to cases where you quote the source directly, but also when you present someone else's work in a somewhat amended (paraphrased) format or when you use someone else's arguments or ideas without the necessary acknowledgement. You are also guilty of plagiarism if you copy and paste information directly from an electronic source (e.g., a web site, e-mail message, electronic journal article, or CD-ROM) without paraphrasing it or placing it in quotation marks, even if you acknowledge the source.

You are not allowed to submit another student's previous work as your own. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credits for the work concerned. In addition, the matter will be referred to the Committee for Discipline (Students) for a ruling. Plagiarism is considered a serious violation of the University's regulations and may lead to your suspension from the University. The University's policy regarding plagiarism is available on the Internet at http://www.library.up.ac.za/plagiarism/index.htm.

For the period that you are a student in the Faculty of Economic and Management Sciences, the following declaration must accompany <u>all</u> written work that is submitted for evaluation. No written work will be accepted unless the declaration has been completed and is included in the particular assignment.

I (full names & surname):	Zarené Viljoen
Student number:	04353498

Declare the following:

- 1. I understand what plagiarism entails and am aware of the University's policy in this regard.
- 2. I declare that this assignment is my own, original work. Where someone else's work was used (whether from a printed source, the Internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
- 3. I did not copy and paste any information <u>directly</u> from an electronic source (e.g., a web page, electronic journal article or CD ROM) into this document.
- 4. I did not make use of another student's previous work and submitted it as my own.
- 5. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his/her own work.

1000	12 November 2017
Signature	Date